

on subjective and objective methods of patients' assessment. Assessment made by nurses with bachelor degree is different from assessment made by ordinary nurses ($P < 0.05$). 2. Assessment made by asking questions, physical examination of patients with arterial hypertension mostly defined symptoms of functional dysfunction of cardiovascular system like dyspnoea, edema, chest pain, peripheral cyanosis, hypertrophy left ventricular, and these symptoms can be theoretical and methodological aspects of nursing diagnosis. 3. Symptoms, first and secondary risk factors of arterial hypertension defined by laboratory investigations, asking questions, physical examination (increased level of blood sugar, cholesterol, triglycerides, decreased level of LDLP, increased systolic and diastolic blood pressure). These findings can be theoretical and methodological aspects for nursing diagnosis.

PCV8

EFFECTIVENESS OF CARDIAC RESYNCHRONIZATION THERAPY IN PATIENTS WITH MILD-MODERATE HEART FAILURE: A SYSTEMATIC REVIEW AND BAYESIAN APPROACH NETWORK META-ANALYSIS

Park HD¹, Lee YS¹, Lee EK²

¹Sungkyunkwan University, Suwon-si, Gyeonggi-do, South Korea, ²Sungkyunkwan University, Suwon-si, Gyeonggi-do, South Korea

OBJECTIVES: To evaluate the relative effectiveness of cardiac resynchronization therapy (CRT) versus implantable cardiac defibrillator (ICD) or optimal medical treatment (OMT) in mild-moderate heart failure patients with New York Heart Association (NYHA) Class I and II. **METHODS:** Randomized controlled trials of CRT, ICD and OMT in mild-moderate heart failure patients were identified from MEDLINE, EMBASE and COCHRANE database. All abstracts were identified for the search terms 'mild-moderate heart failure', 'CRT', 'ICD', 'OMT' and 'NYHA class I or II'. Abstracts were reviewed, and studies containing information on effectiveness profile were obtained for further review. Results were pooled and analyzed by a Bayesian random-effect model. The model used to analyze the relative effectiveness of all-cause mortality and left ventricular ejection fraction (LVEF). **RESULTS:** 11 studies were identified with a total of 6,865 patients. CRT was associated with a significant reduction of the all-cause mortality compared with ICD alone (odds ratio 0.81, 95% credible interval 0.60 to 1.14) or OMT alone (odds ratio 0.59, 95% CrI 0.39 to 0.95). CRT also had a substantial improvement of LVEF compared with ICD treatment (mean difference 3.96, 95% CrI 0.88 to 7.08). The probability determined from the Bayesian analysis that CRT was the best treatment option was 87.2% (7.7% for ICD and 0.9% for OMT respectively). **CONCLUSIONS:** This Bayesian network meta-analysis suggests that CRT could improve the prognosis in patients with mild-moderate heart failure.

PCV9

A COMPARISON OF PREFERENCES FOR THE BENEFITS AND RISKS OF STATINS AMONG KOREAN PHYSICIANS AND PATIENTS USING A DISCRETE-CHOICE EXPERIMENT

Byun JH¹, Kwon SH¹, Ha JH², Lee EK¹

¹Sungkyunkwan University, Suwon, South Korea, ²Ministry of Food and Drug Safety, Chungcheongbuk-do, South Korea

OBJECTIVES: The safety of statins had been a controversial issue. Cerivastatin was withdrawn due to fatal rhabdomyolysis, and the high dose of simvastatin was reported to cause liver failure. This study aims to compare the preferences on the benefits and risks of statins between the patients and physicians. **METHODS:** Discrete choice experiments (DCE) were conducted to measure preferences on the benefits and risks of statins. Two benefit parameters were defined as low-density lipoprotein cholesterol reduction (LDL) and myocardial infarction reduction (MI). And two risk attributes contained liver failure (Liv) and fatal rhabdomyolysis (Rha). The questionnaires for the DCE were designed to satisfy orthogonality, level balance and minimum overlap. 287 subjects (patients 205, physician 82) were participated and repeatedly evaluated a choice set including two hypothetical statins with different level of each attributes. The survey was performed by face-to-face method among Korean patients who take anti-hypertensive or cholesterol-lowering drug, and hospital physicians who treat cardiovascular disease. The data were analyzed by conditional logit (SAS 9.3 software). **RESULTS:** The physicians elicited the preferences for LDL [Mean(±SD):40.14% (±0.06)], MI 30.09% (±0.21), Liv 20.16% (±0.45) and Rha 9.55% (±0.29). While the patients estimated 38.88% (±0.15), 36.32% (±0.33), 11.55% (±0.35), 13.25% (±0.14) respectively. Regarding the willingness to accept risk in exchange for benefit of statins, the physicians accepted risk twice than patients when the statin reduced the MI from 25% to 40% but caused the average hepatotoxicity from 1% to 5%. **CONCLUSIONS:** Preference for the benefits of statins outweighs those of the risks in all respondents. However physicians consider greater importance of the Liv than the Rha while patients are opposite. Physicians and patients need try to narrow the perception gap regarding the risk of statins before starting treatment. Acknowledge This was supported by the grant (13182MFDS703) form Mistry of Food and Drug Safety.

PCV10

ASSOCIATION OF COLCHICINE WITH PRIMARY AND SECONDARY CARDIOVASCULAR EVENTS IN PERITONEAL DIALYSIS PATIENTS: A PROPENSITY SCORE ANALYSIS

Nochaiwong S¹, Ruengorn C¹, Panyathong S², Nanta S³

¹Faculty of Pharmacy, Chiang Mai University, Chiang Mai, Thailand, ²Nephrology Unit, Nakhomping Hospital, Chiang Mai, Thailand, ³Maesai District Hospital, Chiang Rai, Thailand

OBJECTIVES: In peritoneal dialysis (PD) patients, remarkably high risk of cardiovascular (CV) mortality may be explained by atherosclerosis and inflammation. Colchicine has been illustrated to suppress inflammatory mediators via prevention of cholesterol crystal-induced neutrophil, and reduces atherosclerosis progression. This study aimed to explore benefit of colchicine use on primary and secondary CV events, CV mortality, and all-causes mortality in PD patients. **METHODS:** Subjects were first-ever PD patients for ≥ 3 months, and ≥ 18 years old from January 2007 to October 2013 in a retrospective cohort of the PD registry of Nakhomping Hospital, Chiang Mai, Thailand. Users of colchicine for ≥ 3 months were compared to non-users. CV events were the composite incidence of acute myocardial infarction or unstable angina,

hospitalization from heart failure, and cerebrovascular events. Logistic regression of potential-confounders at PD initiation was performed to determine propensity scores (PS), probability of prescribing colchicine. PS and covariates were controlled in multi-variable Cox hazard regression models to investigate association of colchicine and CV events. **RESULTS:** Of 366 subjects, 57 (15.6%) received colchicine, 75 (20.5%) had history of CV events. Follow-up was shorter in the non-users, 19.1 months median (range 3.05-70.0) vs. 26.5 (3.2-71.3). CV events occurred in 7 (12.3%) in the users and 82 (26.5%) in the non-users. Both groups did not differ on entry Charlson co-morbidity index, estimated glomerular filtration rate, serum uric acid levels. Adjusted hazard ratio (HR) of CV events was lower in colchicine users for primary CV events (adjHR 0.28; 95% CI, 0.09-0.90, $p=0.033$), and secondary CV events (adjHR 0.29; 95% CI, 0.08-0.99, $p=0.049$). Moreover, colchicine users had fewer CV mortality and all-causes mortality, although statistical significance was not found. **CONCLUSIONS:** Colchicine appeared to associate with reducing risk of primary and secondary CV events, and demonstrated trends toward lower CV mortality and all-causes mortality in PD patients.

PCV11

HYPERTENSION TREATMENT IN CHRONIC KIDNEY DISEASE STAGE 3, 4 AND 5: A HOSPITAL BASED CROSS-SECTIONAL STUDY IN MALAYSIA

Adnan AS¹, Salman M², Sulaiman SA³, Khan AH², Hamzah DABA⁴

¹CKD Resource Centre, Hospital Universiti Sains Malaysia, Kota Bharu, Kelantan, Malaysia,

²Universiti Sains Malaysia, Minden, Malaysia, ³Universiti Sains Malaysia, Penang, Malaysia,

⁴Urology Unit, Department of Surgery, Health Campus, Universiti Sains Malaysia, Kubang Kerian, 16150, Kelantan, Malaysia, Kelantan Malaysia, Malaysia

OBJECTIVES: To investigate the management of hypertension in adult Malaysian population suffering from chronic kidney disease stage (CKD) stage 3-5. **METHODS:** A retrospective, cross-sectional study was conducted on 300 patients with CKD stage 3 ($n = 98$), 4 ($n = 76$) and 5 ($n = 126$) in CKD Resource Center of Hospital Universiti Science Malaysia, Kelantan, Malaysia. **RESULTS:** The mean age of all patients was 58.86 ± 13.47 years and there was preponderance of male subjects (69%). The prevalence of hypertension was 91.3%; almost universal among the sufferers of stage 3, 4 and 5 of CKD (87.8%, 94.7% and 92.1%, respectively). In CKD stage 5, mean systolic blood pressure was considerably higher than in stage 4 and 3 ($p = 0.009$). The percentage of patients with systolic BP < 130 mm Hg and diastolic BP < 80 mm Hg was 30.3% and 49.0%, respectively. Only 24.3% of the total patients had BP $< 130/80$ mm Hg despite using multiple antihypertensive medications. The proportion of patients consuming antihypertensive drugs was as: angiotensin-converting enzyme inhibitors (ACE-Is) (25%), angiotensin receptor blockers (ARBs) (14.3%), combined ACE-Is and ARBs (2.7%), calcium channel blockers (66.3%), β -blockers (40.7%), diuretics (60%) and α -blockers (14.3%). There was significantly lower percentage of patients on ACE-Is and ARBs in stage 5 than in stage 4 and 3 CKD patients. Proteinuria was present in 71.7% of the patients and there was significant difference proteinuria between stage 3, 4 and 5 (55.1 vs 59.2 vs 92.1, $p = 0.000$). **CONCLUSIONS:** Underutilization of some classes of anti-hypertensive medications is apparent. Higher percentage of proteinuria in CKD stage 5 patients may be attributed to the underuse of ACE-Is and ARBs in stage 5. The study further indicated the need of employing instructive efforts to get valuable outcomes of antihypertensive treatment in CKD sufferers.

PCV12

LONG TERM FOLLOW UP OF PRIMARY AND SECONDARY PREVENTION IMPLANTABLE CARDIOVERTER DEFIBRILLATOR PATIENTS: "REAL-WORLD" DATA FROM THE ISLAND OF CRETE

Kanoupakis E¹, Fanourgiakis J¹, Mavrikis H¹, Kallergis E¹, Petousis S¹, Vernardos M¹, Chlouverakis G², Vardas P¹

¹University Hospital, Heraklion, Greece, ²University of Crete, Heraklion, Greece

OBJECTIVES: The beneficial effects of implantable cardioverter defibrillators (ICDs) in primary and secondary prevention patients are well established. However, data on potential differences between both groups in mortality and ICD therapy rates during long-term follow-up are scarce. The aim of the study was to assess differences in mortality and ICD therapy between secondary and primary prevention ICD recipients. **METHODS:** All patients treated with an ICD, regardless of the underlying cardiac pathology, at the island of Crete were included in the current analysis. The study population was grouped by the type of prevention (secondary or primary) for sudden cardiac death. The primary endpoint was all-cause mortality. The secondary endpoint was the occurrence of device therapy (appropriate or inappropriate). **RESULTS:** A total of 854 (88.6% men) ICD recipients were included. Of these, 623 (73%) patients received an ICD for primary prevention of sudden cardiac death and 231 (27%) patients for secondary prevention. During a mean follow-up of 12.4 ± 7.8 years, 177 (20.7%) patients died. The incidence of mortality was 35.5% for secondary prevention patients and 15.2% for primary prevention patients ($p < 0.001$). Ventricular arrhythmia triggered appropriate therapy in 91 (39.4%) secondary prevention patients. Against the number of primary prevention patients that received appropriate therapy was 126 (20.2%). A comparable risk for inappropriate shocks was observed. **CONCLUSIONS:** During long-term follow-up, primary prevention patients exhibited a lower risk all-cause mortality. Both groups showed similar occurrence of inappropriate shocks but secondary prevention patients showed a higher rate of appropriate therapy.

PCV13

EFFECTIVENESS OF CATHETER-BASED RENAL DENERVATION FOR TREATMENT RESISTANT HYPERTENSION – RESULTS OF A SYSTEMATIC REVIEW AND META-ANALYSIS

McBride M¹, Krum H², Schlaich M³, Whitbourn R⁴, Walton T⁵, Tilden D⁶, Gillespie J⁷

¹Medtronic Australasia Ltd, North Ryde, NSW, Australia, ²Monash University, Melbourne, Australia, ³Baker IDI, Melbourne VIC, Australia, ⁴University of Melbourne, Melbourne, Australia, ⁵Epworth Hospital, Richmond, VIC, Australia, ⁶THEMA Consulting Pty. Ltd., Pyrmont, Australia, ⁷Medtronic Australasia Ltd, North Ryde, Australia

OBJECTIVES: Catheter-based renal denervation (RDN) is a promising therapy option for patients with treatment resistant hypertension (TR-HTN). The RDN evidence base currently consists of several studies with limited sample size and variations in design,